

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method in a server for retransmitting a plurality of data packets from a sender to a receiver in a telecommunications network, wherein the data transmission is performed over a link having limited transmission capacity, and a presentation time is defined, for a first data packet of said plurality, as corresponding to the latest time when the first data packet of said plurality must arrive at the receiver to be processed and presented by the application, wherein the receiver performs a first check whether data packets are correctly received and selects a further data packet for retransmission according to the result of the first check, the method comprising:

determining a delay budget from the presentation time of the first data packet, the delay budget indicating a transmission capacity available for data packet retransmissions without delaying the first data packet beyond the presentation time;

determining a delay requirement for the retransmission of the selected data packet from the limit of the transmission capacity and from the transmission capacity required for the selected data packet;

comparing the delay requirement and the delay budget; and

retransmitting the selected data packet if the delay budget is at least equal to the delay requirement, otherwise cancelling the retransmission of the data packet.

2. (Previously Presented) The method according to claim 1, wherein the receiver stores data packets in a buffer with a buffer fill level and wherein the delay budget is a function of the buffer fill level.

3. (Previously Presented) The method according to claim 1, wherein the delay budget is determined from the presentation times for each of a group comprising at least two first data packets.

4. (Previously Presented) The method according to claim 3, wherein the at least two first data packets of the group are to be transmitted in a predefined sequence, and wherein additional data packets are to be added to the group, which are the next data packets for transmission in the predefined sequence, and wherein the adding of additional data packets to the group is stopped if the delay budget is expected to remain constant for further additional packets.

5. (Previously Presented) The method according to claim 1, wherein the receiver requests retransmission of the at least one data packet in a status message transmitted to the sender.

6. (Previously Presented) The method according to claim 1, wherein the delay budget is reduced by the delay requirement if a retransmission is performed.

7. (Previously Presented) The method according to claim 6, wherein a further comparison of the delay budget with a further delay requirement is performed before a further calculation of the delay budget.

8. (Previously Presented) The method according to claim 1, wherein the delay budget is updated if a present rate of the data transmission is lower than the limit of the data transmission capacity.

9. (Previously Presented) The method according to claim 1, wherein a priority is attributed to the at least one selected data packet and wherein the retransmission is executed according to said priority.

10. (Previously Presented) The method according to claim 1 wherein a presentation time for the at least one selected data packet is compared to an estimated arrival time of the selected at least one data packet at the receiver in a further check, and wherein the retransmission of the selected at least one data packet is performed according to the result of the further check.

11. (Currently Amended) A sender in a network for transmitting a plurality of data packets to a receiver, the sender comprising:

a transmission unit for transmitting data over a link having a limited transmission capacity;

a means for receiving an indication whether data packets are correctly received by the receiver; and

a processing unit for:

defining a presentation time₁ for a first data packet of said plurality, as corresponding to the latest time when the first data packet of said plurality must arrive at the receiver to be processed and presented by the application, and selecting a data packet for retransmission according to the indication;

determining a delay budget from the presentation time of the first data packet, the delay budget indicating a transmission capacity available for data packet retransmissions, without delaying the first data packet beyond the presentation time;

determining a delay requirement for the retransmission of the selected data packet from the limit of the transmission capacity;

performing a comparison of the delay requirement and the delay budget; and

retransmitting the selected data packet if the delay budget is at least equal to the delay requirement, otherwise cancelling the retransmission of the data packet.

12. (Currently Amended) A receiver in a network for the reception of a plurality of data packets from a sender, the receiver comprising:

- a reception unit for receiving the plurality of data packets over a link having a limited transmission capacity;
- a transmission unit for sending an indication whether data packets are correctly received; and
- a processing unit for:
 - determining a presentation time, as corresponding to the latest time when the first data packet of said plurality must arrive at the receiver to be processed and presented by the application, of a first data packet to be transmitted over the link with a limited transmission capacity,
 - performing a check of whether data packets are correctly received,
 - determining a delay budget from the presentation time of the first data packet, the delay budget indicating a transmission capacity available for data packet retransmissions without delaying the first data packet beyond the presentation time;
 - determining a delay requirement for retransmission of a selected data packet from the limit of the link's transmission capacity and from the transmission capacity required for the selected data packet,
 - performing a comparison of the delay requirement and the delay budget,
 - and
 - retransmitting the selected data packet if the delay budget is at least equal to the delay requirement, otherwise cancelling the retransmission of the data packet.

13. – 22. (Canceled)

23. (Currently Amended) The method of claim 1, wherein the ~~budget~~-delay budget is computed as

$$t_n = t_{n-1} + \max(8 \cdot s_{n-1}, \sigma) / R;$$

where t_n is when an original data n can be sent and is determined by the time t_{n-1} at which the original data packet n was sent, R is the data rate of a bottleneck link in bits per second, and size s_{n-1} of the previous packet in bytes and σ denotes waiting time required to avoid buffer overflow.

24. (Currently Amended) The sender of claim 11, wherein the budget-delay budget is computed as

$$t_n = t_{n-1} + \max(8*s_{n-1}, \sigma)/R;$$

where t_n is when an original data n can be sent and is determined by the time t_{n-1} at which the original data packet n was sent, R is the data rate of a bottleneck link in bits per second, and size s_{n-1} of the previous packet in bytes and σ denotes waiting time required to avoid buffer overflow.

25. (Currently Amended) The receiver of claim 12, wherein budget-delay budget is computed as

$$t_n = t_{n-1} + \max(8*s_{n-1}, \sigma)/R;$$

where t_n is when an original data n can be sent and is determined by the time t_{n-1} at which the original data packet n was sent, R is the data rate of a bottleneck link in bits per second, and size s_{n-1} of the previous packet in bytes and σ denotes waiting time required to avoid buffer overflow.

26. (Currently Amended) The method of claim 1, wherein the delay budget indicates indicates the amount of time by which the first data packet can be delayed without resulting in a buffer underflow.